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EXAMINER	
SWICKHAMER, CHRISTOPHER M	
ART UNIT	**PAPER NUMBER**
2662	9

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/990,331	SEBIRE, BENOIST	
	Examiner	Art Unit	
	Christopher M Swickhamer	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *28 August 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the Amendment filed 08/28/03. The Examiner approves the changes to the title and drawings. Claims 1-20 have been entered. Currently no claims are in condition for allowance.

Specification

2. The specification is objected for containing Internet URLs on pages 9 and 11. The URLs must be removed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Referring to claims 1, 11 and 18, the claim states that classifying is "based on data in one of a checksum coverage field of a UDP packet and a payload type field of an RTP packet." This does not agree with the specification. The specification describes using the checksum

coverage field in UDP packets and the RTP payload type in alternate embodiments. The specification does not describe a packet containing both a UDP checksum coverage field and a RTP payload type field that can be used to classify the packet. The claims are also written so that the packet could be interpreted to be a different packet from the UDP packet or RTP packet, which does not agree with the specification.

5. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 1, 11 and 18, the claims state using the payload type field of an RTP packet to classify one part of the packet as more important than the other part. On page 11, lns. 22-page 12, lns. 11, of the specification, is where the system is described using the payload type field to classify the RTP packet. However this description fails to describe how the payload is split according to the payload type field. This would not enable one of ordinary skill in the art on how to use the payload type field to split the payload into the different traffic classes.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-3, 5-8 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by Xie et al (*Internet Engineering Task Force, Error Tolerant RTP Payload format for AMR*, hereafter Xie).

- Referring to claim 1 as best understood by the Examiner, Xie discloses a method comprising: identifying a first part of the payload of a packet and a second part of the payload of said packet (section 3-3.4); classifying one of said first part and said second part as being more important and classifying said other part as being less important, said classifying being based on data in one of a checksum coverage field of a UDP packet (section 3.1) and a payload type field of an RTP packet; and transmitting said more important part of said packet differently than said less important part of said packet (Fig. 3, using a checksum to protect the header, section 3.3-3.4).

- Referring to claim 2, Xie discloses the method of claim 1, wherein said packet comprises a UDP packet (Fig. 1, section 3.1).

Referring to claim 3, Xie discloses the method of claim 2, wherein said classifying is based on data in a checksum coverage field of said UDP packet (section 3.3-3.4)

- Referring to claim 5, Xie discloses the method of claim 4, wherein said transmitting further comprises transmitting said more important part using stronger channel coding (checksums for the header) than the channel coding for said less important part (section 3.4, the header is protected by the transport checksum, while the payload is error tolerant and has different levels of error protection depending on the class of bits being transported).

- Referring to claim 6, Xie discloses the method of claim 1, wherein said packet comprises an RTP packet (section 3.1, Fig. 1).

- Referring to claim 7, Xie discloses the method of claim 6, wherein said classifying is based on data in the RTPAMR frame type field (payload type, section 4.2, the different frame type indices shown in table 1 represent how the payload is broken down into different classes for error protection, see table 3 of the previously cited Krishnarajah et al reference, for the number of bits associated with each class A, B, C for each level of error protection).

- Referring to claim 8, Xie discloses the method of claim 1, further comprising receiving said packet from a multimedia network (abstract).

- Referring to claim 10, Xie discloses the method of claim 9, wherein said first part and said second part of said packet are transmitted over a radio access network to a mobile terminal (abstract).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 4, 9 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie in view of Krishnarajah et al (USP 2003/0081592, hereafter Krishnarajah).

- Referring to claim 4, Xie discloses the method of claim 1, but does not expressly disclose wherein said transmitting comprises transmitting said more important part using a first radio bearer and transmitting said less important part using a second radio bearer. Krishnarajah discloses a system using Adaptive Multi-rate (AMR) codecs where the data is split into different

classes, and given different levels of errors protection. The system can be used to send RTP and UDP data packets. The data is transported across the wireless network using different bearers (paragraph [0006]-0008], [0035]-[0040], [0047], [0056]-[0059]). The system of Xie could be modified so that the different data classes within the packet, such as the class A-C bits are split up and send over different bearer classes. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to transmit the packets over different bearers. One of ordinary skill in the art would have been motivated to do this since it allows the packets requiring the same level of treatment (quality of service, delay, etc.) to be placed together. Radio bearers are connection designed to support packets that are transmitted at the same treatment class (paragraph [0008]).

- Referring to claim 9, Xie discloses the method of claim 8, but does not expressly disclose wherein said packet is received at a UMTS system. The system of Xie is designed for third generation wireless networks, which include UMTS. The system of Xie could be modified to be used in a UMTS environment. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Xie, with UMTS. One of ordinary skill in the art would have been motivated to do this since UMTS supports wireless data transfers. The system would be compatible with over UMTS wireless devices.

- Referring to claim 11 as best understood by the Examiner, Xie discloses a method of transmitting a packet comprising: determining a first part of a packet and a second part of a packet based on data in one of a checksum coverage field of a UDP packet and a payload type field of an RTP packet (section 3.1-3.4); transmitting the first part of said packet across a radio access network (using a first radio bearer); and transmitting the second part of said packet across

said radio access network (using a second radio bearer, section 3.1-3.4). Xie does not expressly disclose sending the different sections using different bearers. Krishnarajah discloses a system using Adaptive Multi-rate (AMR) codecs where the data is split into different classes, and given different levels of errors protection. The system can be used to send RTP and UDP data packets. The data is transported across the wireless network using different bearers (Fig. 12, paragraph [0006]-0008], [0035]-[0040], [0047], [0056]-[0059]). The system of Xie could be modified so that the different data classes within the packet, such as the class A-C bits are split up and send over different bearer classes. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to transmit the packets over different bearers. One of ordinary skill in the art would have been motivated to do this since it allows the packets requiring the same level of treatment (quality of service, delay, etc.) to be placed together. Radio bearers are connection designed to support packets that are transmitted at the same treatment class (paragraph [0008]).

- Referring to claim 12, Xie discloses the method of claim 11, wherein said packet comprises a UDP packet (Fig. 1).

- Referring to claim 13, Xie discloses the method of claim 12, wherein said classifying is based on data in a checksum coverage field of said UDP packet (section 3.3).

- Referring to claim 14, Xie discloses the method of claim 11, wherein transmitting said first part comprises transmitting said first part using a first type of channel coding, and transmitting said second part comprises transmitting said second part using a second type channel coding, said first type of channel coding being greater than said second type of channel coding (section 3.4, the header is protected by the transport checksum, while the payload is error

tolerant and has different levels of error protection depending on the class of bits being transported).

- Referring to claim 15, Xie discloses the method of claim 11, wherein said packet comprises an RTP packet (section 3.1).

- Referring to claim 16, Xie discloses the method of claim 15, further comprising determining said first part and said second part based on data in a RTP/AMR header frame type field (payload type field) of said RTP/AMR packet (section 3.4, section 4.2).

- Referring to claim 17, Xie discloses the method of claim 11, further comprising receiving a packet from a multimedia network (abstract).

- Referring to claim 18 as best understood by the Examiner, Xie discloses an apparatus to communicate a packet, said apparatus including structure to identify a first part of said packet and a second part of said packet, based on data in one of a checksum coverage field of a UDP packet and a payload type field of an RTP packet (section 3.1-3.4), and structure to transmit said first part of said packet across a radio access network (using a first radio bearer) and to transmit said second part of said packet across said radio access network (using a second radio bearer). Xie does not expressly disclose sending different parts of the packet across different bearers. Krishnarajah discloses a system using Adaptive Multi-rate (AMR) codecs where the data is split into different classes, and given different levels of errors protection. The system can be used to send RTP and UDP data packets. The data is transported across the wireless network using different bearers (Fig. 12, paragraph [0006]-0008], [0035]-[0040], [0047], [0056]-[0059]). The system of Xie could be modified so that the different data classes within the packet, such as the class A-C bits are split up and send over different bearer classes. At the time the invention was

made, it would have been obvious to one of ordinary skill in the art to transmit the packets over different bearers. One of ordinary skill in the art would have been motivated to do this since it allows the packets requiring the same level of treatment (quality of service, delay, etc.) to be placed together. Radio bearers are connection designed to support packets that are transmitted at the same treatment class (paragraph [0008]).

- Referring to claim 19, Xie discloses the apparatus of claim 18, wherein said structure is provided in a mobile terminal (abstract).

- Referring to claim 20, Xie discloses the apparatus of claim 18, wherein said structure is provided in said radio access network so as to transmit said first part and said second part to a mobile terminal (abstract).

Response to Arguments

10. Applicant's arguments filed 08/28/03 have been fully considered but they are not persuasive.

- In reference to the argument on page 8, last paragraph, the applicant states the Krishnarajah reference does not qualify as prior art. The Examiner respectfully disagrees. According to MPEP § 706.02, if the provisional supports the information in the application, the effective filing date of the application is the filing date of the provisional. Therefore the effective filing data of the Krishnarajah reference, which is June 1, 2001, antedates the filing date of the instant application and qualifies as prior art.

- The remaining arguments are moot in view of new grounds of rejection

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ekudden et al, USP 2001/0041981 A1. *Partial Redundancy Encoding of Speech.*
- Barany et al, USP 2003/0189900 A1. *Communications Using Adaptive Multi-rate Codecs.*
- Sjoberg et al, Internet Engineering Task Force, *RTP payload format and file storage format for AMR audio.*
- Choi et al, USP 2002/0040460 A1. *Channel error protection implementable across network layers in a communication system.*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Swickhamer whose telephone number is (703) 306.4820. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305.3900.

CMS
October 30, 2003

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600